AUTONOMOUS ROBOT AUTO-DOCKING AND ENERGY MANAGEMENT SYSTEMS AND METHODS

Abstract

A method for energy management in a robotic device includes providing a base station for mating with the robotic device, determining a quantity of energy stored in an energy storage unit of the robotic device, and performing a predetermined task based at least in part on the quantity of energy stored. Also disclosed are systems for emitting avoidance signals to prevent inadvertent contact between the robot and the base station, and systems for emitting homing signals to allow the robotic device to accurately dock with the base station.